

CLAIMS

1. A data-processing apparatus configured to receive a broadcast signal and be connected to a network on which broadcast stations disclose content-related information related to broadcast contents, comprising:

receiving means for receiving the broadcast signal of a prescribed frequency assigned to each of the broadcast stations;

reproducing means for reproducing the broadcast signal received by the receiving means;

setting means for setting a frequency for the broadcast signal that can be received and for recording frequency information about the frequency set, in a predetermined recording medium;

communications control means for acquiring the content-related information through the network;

display means for displaying predetermined information; and

control means for causing the display means to display a list of broadcast stations corresponding to at least one frequency set, in accordance with the frequency information set by the setting means, for acquiring the content-related information disclosed by the broadcast station selected from the list, and for causing the display means to display the content-related information.

2. The data-processing apparatus according to claim 1, wherein the setting means records broadcast-station information

containing broadcast station ID data identifying the broadcast station corresponding to the frequency and the name of the broadcast station, in association with the frequency information.

3. The data-processing apparatus according to claim 2, wherein the control means is connected to the network, transmits the broadcast station ID data identifying the broadcast station selected by the communications control means, to an information-providing apparatus which provides information about a source of the content-related information distributed by the broadcast station, receives information about the broadcast station from the source, and collects the content-related information in accordance with the information about the source.

4. The data-processing apparatus according to claim 1, wherein the control means acquires information about a source of the content-related information distributed by all broadcast stations that correspond to the frequencies of broadcast signals which can be received, acquires the content-related information in accordance with the information about the source, and records the number-related information acquired, in the predetermined recording medium.

5. A data-processing method for use in a data-processing apparatus configured to receive a broadcast signal and be connected to a network on which broadcast stations disclose content-related information related to broadcast contents, comprising the steps of:

setting a frequency for any of the broadcast signal for the broadcast stations, which can be received, and recording frequency information about the frequency set, in a predetermined recording medium;

displaying a list of broadcast stations corresponding to at least one frequency set, on predetermined display means, in accordance with the frequency information, while the broadcast signal selected is being received or not being received;

acquiring content-related information disclosed by a broadcast station selected from the list displayed, through the network; and

displaying the content-related information acquired, on the display means.

6. The data-processing method according to claim 5, wherein:

the data-processing apparatus is configured to communicate with an authentication server which has an authentication function and a related-information provision server which provides the content-related information; and

in the step of acquiring the related information through the network, the data-processing apparatus comprises the steps of:

transmitting request information to the related-information provision server, together with a service-session ID for a session with the related-information provision server, said request information requesting for

information related to the contents in a broadcast program being received;

receiving information indicating an authentication error and service-identifying information identifying the related-information provision server, from the related-information provision server;

transmitting, to the authentication server, an authentication-ticket issuance request information requesting for issuance of an authentication ticket for accessing the related-information provision server, together with the authentication-session ID for a session with the authentication server;

receiving an authentication ticket issued from the authentication server when the authentication server authenticates the data-processing apparatus;

transmitting authentication request information to the related-information provision server, together with the authentication ticket;

receiving the service-session ID when the related-information provision server authenticates the data-processing apparatus;

transmitting request information for requesting for the related information, to the related-information provision server, together with the service-session ID received; and

receiving the related information which the related-information provision server transmits in response to the request information upon authenticating the data-processing apparatus.

7. The data-processing method according to claim 6, wherein the data-processing apparatus comprises the steps of:

receiving information indicating an authentication error and transmitting an user ID and a password to the authentication server; when the authentication server fails to authenticate the data-processing apparatus;

receiving the authentication-session ID for a session with the authentication server, when the authentication server authenticates the user ID and the password; and

transmitting the authentication ticket issuance request information to the authentication server, together with the authentication-session ID.

8. A data-processing program for receiving broadcast signals and data processing by connecting to a network on which broadcast stations disclose content-related information related to broadcast contents, causing a computer to perform the steps of:

setting the frequency of any one of the broadcast signals of predetermined frequencies, which can be received by the data-processing apparatus, and recording, in a prescribed recording medium, frequency information representing the frequency set:

displaying a list of broadcast stations corresponding to at

least one frequency set, on predetermined display means, in accordance with the frequency information, while the broadcast signal selected is being received or not being received;

acquiring content-related information disclosed by a broadcast station selected from the list displayed, through the network; and

displaying the content-related information acquired, on the display means.